

**SCANNING DEVICE WITH SENSORS AND CAMERA
OR TRICORDER.**

Inventor, Michael Francis Niemi

U.S. CITIZEN

6499 South Daffodil Way

West Jordan UTAH 84084.

801-679-0251

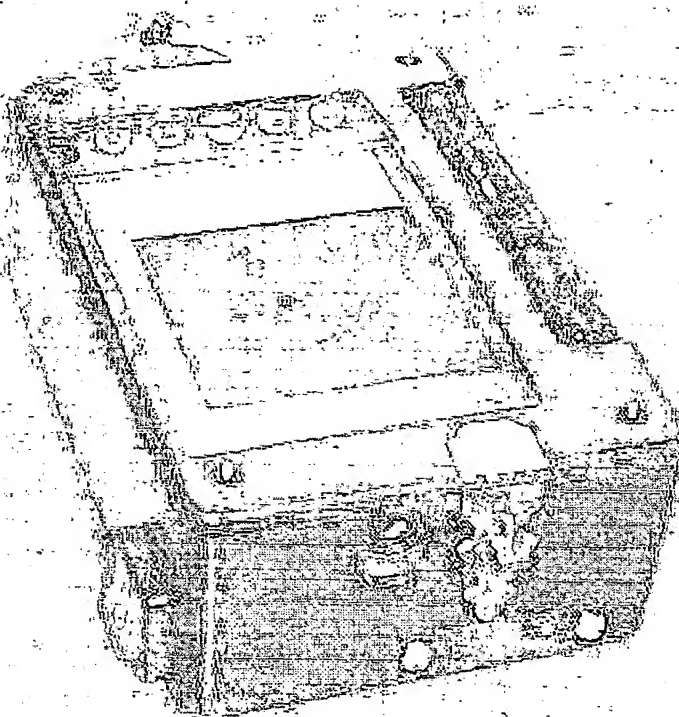


fig 1b

The front of the device shows the EyeModule2, attached to the HandSpring Prism, which can photograph an object (the circular lens above and left of the latch, and the IR Ranger, which projects an infrared beam and reports back when an object is nearing or is to near the scanner or by the operator of the device. This picture shows the RS232 connector in back clearly.

Drawings and Photos:

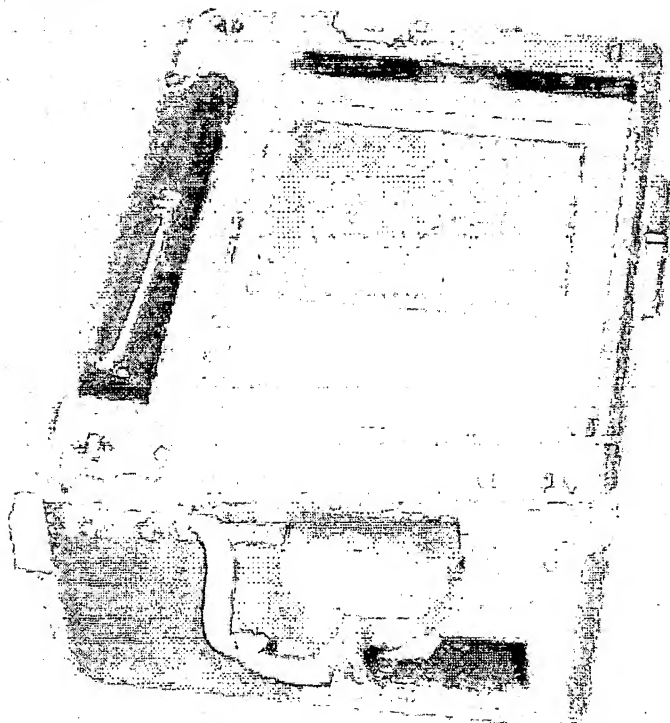


fig 1a

This is the scanning device in its whole form. The device uses a HandSpring Prism handheld computing device to save information, including photographs and sensor data from the controller chip inside the case to the Prism's cradle adaptor you see on the bottom.

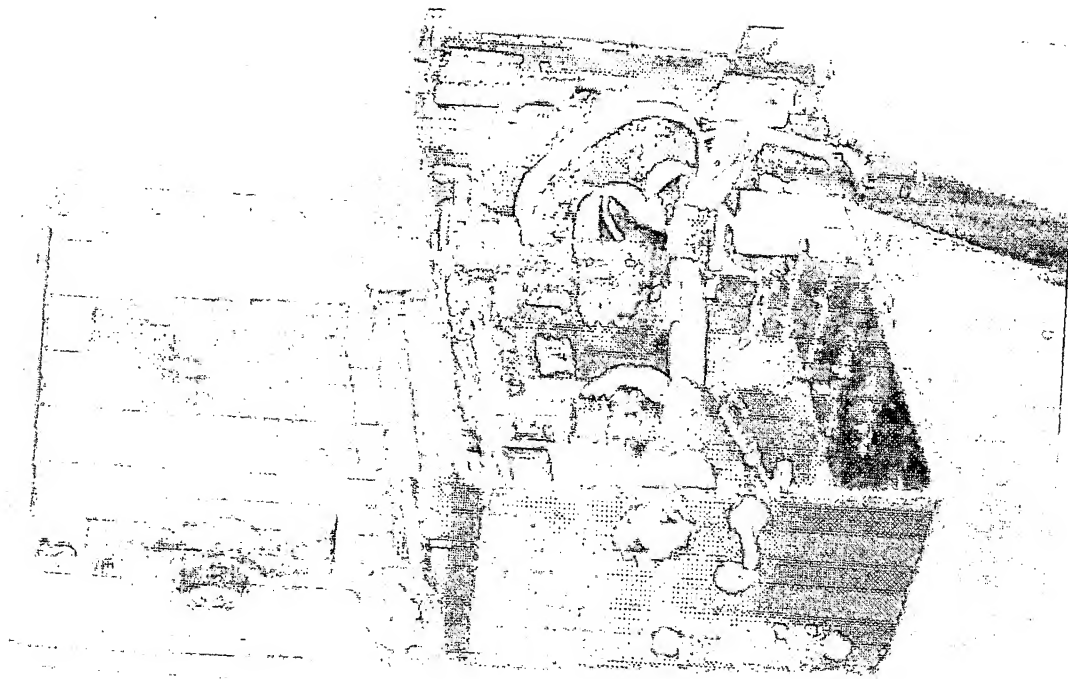


fig 1c

Here you can see on the left the Prism, with the EyeModule2 camera that displays an active live feed of the activity that occurs in front of the case, and you can see more clearly, a 9.6 rechargeable battery off to the right of the case and a BrainStem controller, compass and Inferred Ranging device exposed in front of the case. The Brainstem is shown below. The Prism itself has a Lithium Ion rechargeable battery and its own independent on/off switch. The controller battery has an on/off switch on the right side of the case to conserve power (the red switch parallel to the Prism).

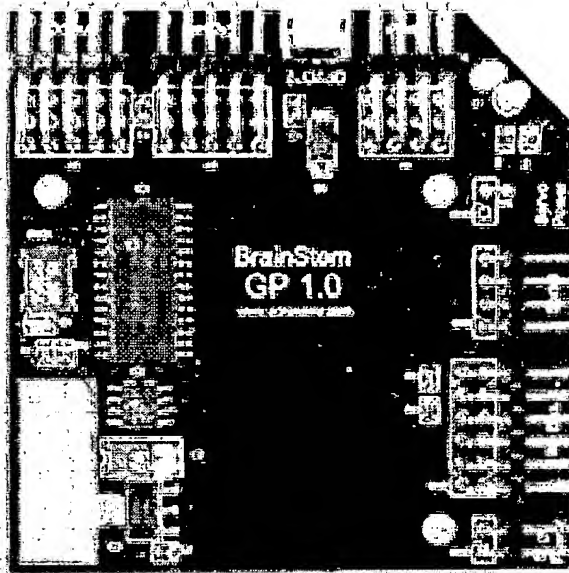


fig 1d

The BrainStem can control as many devices as possible, which for this patent application, controls a compass and sends the information to the Prism serially with the headings on the Prism in degrees and the direction in a Character (N, NW, W, etc). It also controls the IR Ranger, which will gauge distances from an object directly in front of the case, and report the distance serially to the Prism in inches. The Controller has its own processor to independently control the devices and continually send RS232 data to the Prism, regardless of what the Prism is doing. There is an on off switch to the 9 volt battery to turn current off to the BrainStem to conserve power. The Battery connected to this device can directly run off of A/C power when plugged into an electrical outlet.

The Pin sets you see are different adapters that supply the controller board and its processor power, I2C, analog and serial data, and a pin set to send out all information in a program downloaded from a Personal Computer in order to arraign how the data is to be sent to the Prism.

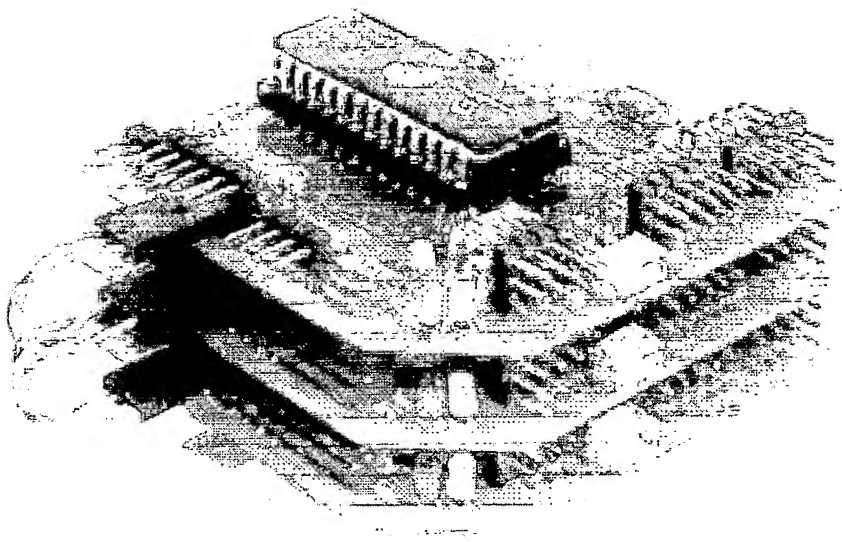


fig 1d

The BrainStem can also be stacked to attach more than one device or sensor that outputs its data in the same manner, analog, serial, I2C, etc. The lowest board holds the programming that would manage the data to the Prism device.